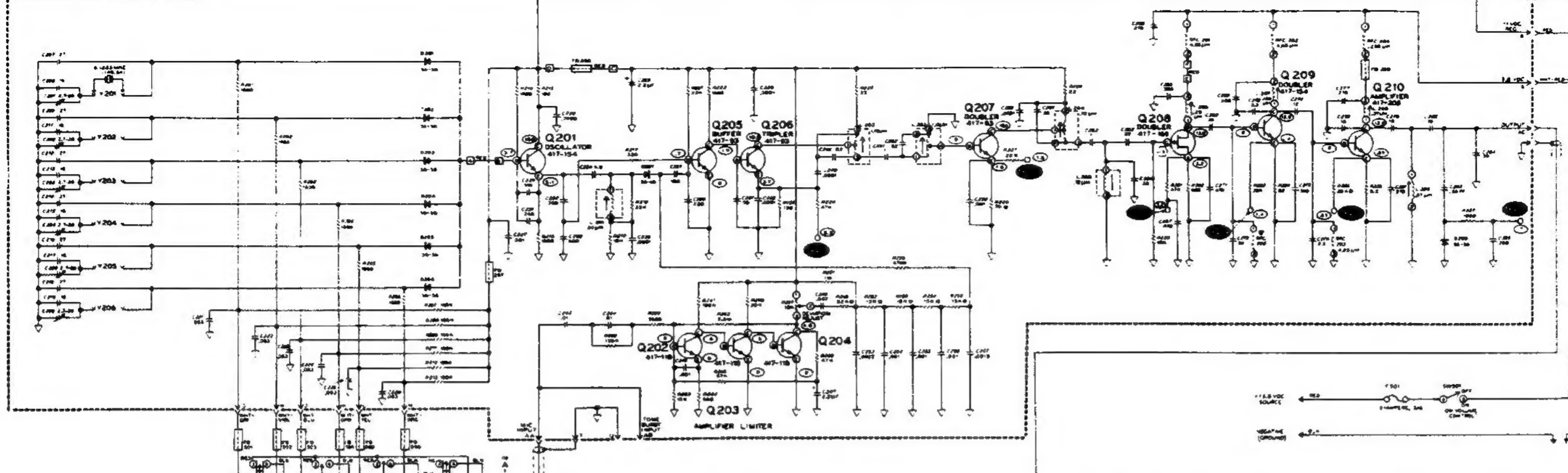
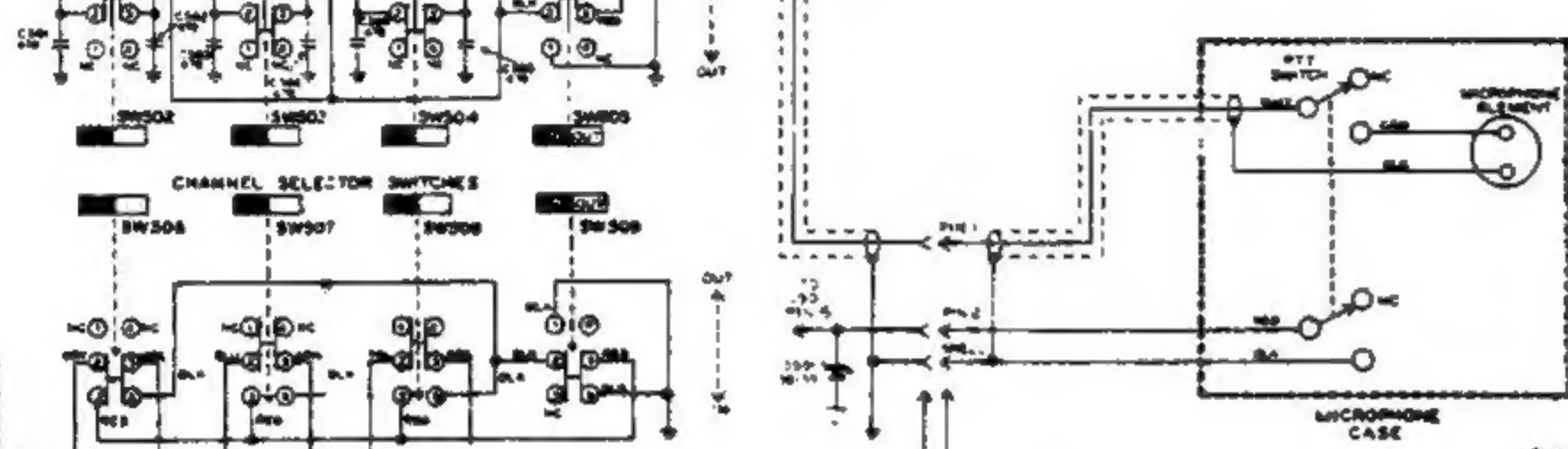


- NOTES
1. COMPONENT NUMBERS ARE IN THE FOLLOWING GROUPS:  
100-199 PARTS ON THE RECEIVER CIRCUIT BOARD  
200-299 PARTS ON THE TRANSMITTER CIRCUIT BOARD  
300-399 PARTS ON THE POWER AMPLIFIER CIRCUIT BOARD  
400-499 PARTS ON THE HASH FILTER/REGULATOR CIRCUIT BOARD  
500-599 PARTS ON THE CHASSIS
2. ALL RESISTORS ARE 1/2 WATT 10% TOLERANCE UNLESS OTHERWISE NOTED. RESISTOR VALUES ARE IN OHMS, K=1000, M=1,000,000.
3. CAPACITORS LESS THAN 1 ARE IN PICOFARADS; ALL OTHER CAPACITORS ARE IN MICROFARADS UNLESS OTHERWISE MARKED.
4. INDUCTORS ARE SHOWN IN MH (MILLIHENRIES) AND  $\mu$ H (MICROHENRIES).
5. ARROWS AT CONTROLS INDICATE CLOCKWISE ROTATION VIEWED FROM THE SHAFT END OF THE CONTROL.
6. THIS SYMBOL AROUND A PART NUMBER MEANS THAT THIS COMPONENT IS MOUNTED ON THE CHASSIS, THOUGH ITS LOCATION ON THE SCHEMATIC SUGGESTS OTHERWISE.
7. THIS SYMBOL INDICATES A POSITIVE DC VOLTAGE MEASURED WITH A HIGH INPUT IMPEDANCE VOLTMETER FROM THE POINT INDICATED TO CHASSIS GROUND UNDER THE FOLLOWING CONDITIONS:  
1. NO SIGNAL INPUT  
2. RECEIVER SQUELCHED AT THRESHOLD  
3. VOLUME FULLY COUNTERCLOCKWISE  
4. LOWEST FREQUENCY RECEIVER OSCILLATOR CRYSTAL SELECTED  
5. TRANSMITTER VOLTAGES KEYS WITHOUT MODULATION
8. THIS SYMBOL INDICATES CIRCUIT BOARD GROUND.
9. THIS SYMBOL INDICATES CHASSIS GROUND.
10. THIS SYMBOL INDICATES A CIRCUIT BOARD CONNECTOR PIN AND A FEMALE WIRE CONNECTOR.
11. THIS SYMBOL INDICATES A SOLDERED CONNECTION TO A CIRCUIT BOARD.
12. SEE TABLES 1 AND 2 FOR VOLTAGES.
13. THIS SYMBOL DESIGNATES A 5% TOLERANCE RESISTOR.
14. THIS SYMBOL DENOTES A COIL WOUND BY THE KIT BUILDER.
15. REFER TO THE "CHASSIS PHOTOGRAPHS" AND "CIRCUIT BOARD X-RAY VIEWS" FOR THE PHYSICAL LOCATION OF PARTS.
16. P101 AND J501 ARE MATING SIDE VIEWS.
17. TP-TEST POINT FOR FERRITE BEAD.
18. THIS SYMBOL INDICATES A RECTIFIED VOLTAGE MEASURED WITH A HIGH INPUT IMPEDANCE VOLTMETER. USE A 100K RESISTOR IN SERIES WITH THE VOLTMETER PROBE.

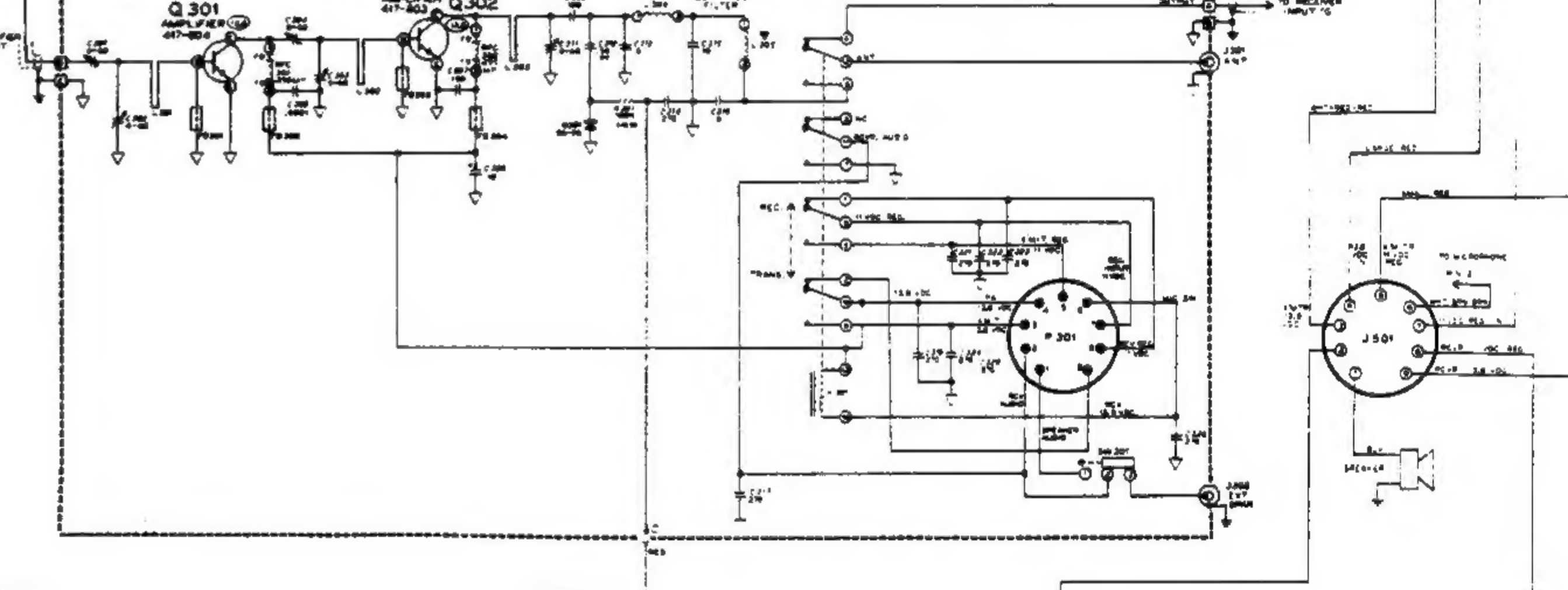
TRANSMITTER CIRCUIT BOARD



SCHEMATIC OF THE  
HEATHKIT<sup>®</sup>  
2-METER FM TRANSCEIVER  
MODEL HW-202



POWER AMPLIFIER CIRCUIT BOARD



HASH FILTER/REGULATOR

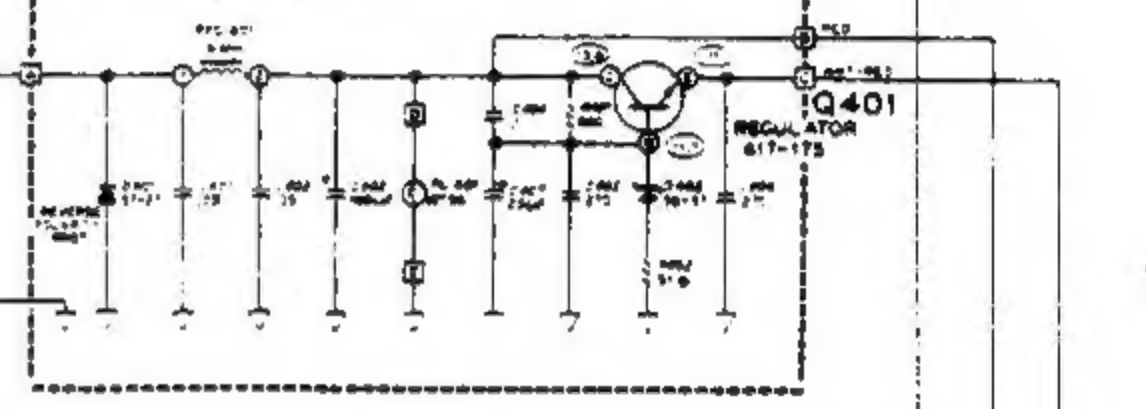


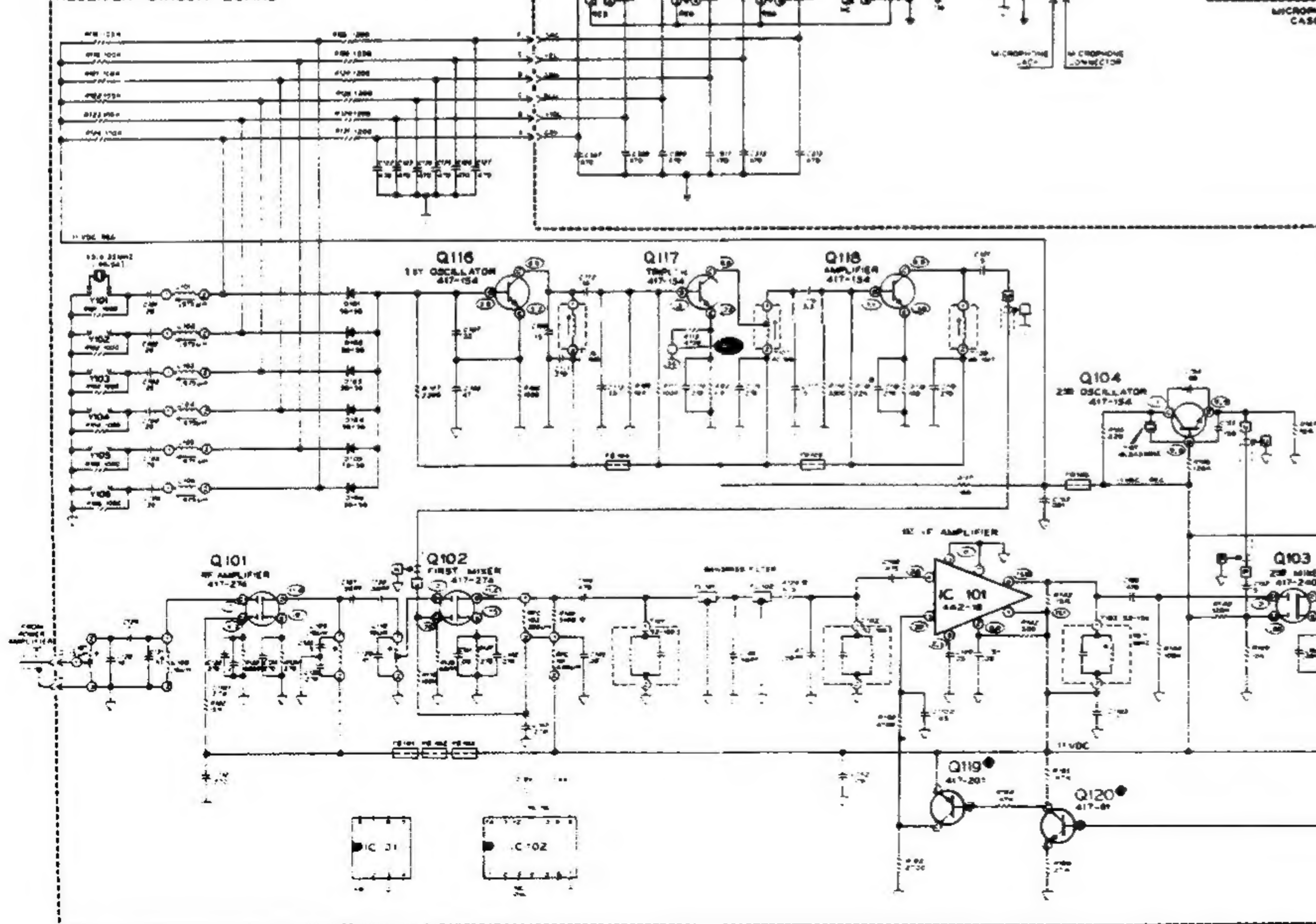
TABLE 1  
RECEIVER SQUELCHED AT  
THRESHOLD, NO SIGNAL  
INPUT

	E	B	C
Q105	1.1	1.7	5.8
Q106	1.1	1.7	5.2
Q107	3.5	4.2	10.5
Q108	3.6	3.6	11.0
Q114	11.0	11.1	1.1
Q120	0	0	11.1

TABLE 2  
CONTROL AS IN TABLE 1,  
WITH 1000  $\mu$ V INPUT  
SIGNAL











	E	B	C
Q105	1.7	1.8	8.0
Q106	1.2	1.8	5.3
Q107	1.3	2	10.9
Q108	1.3	2.0	8.8
Q114	12.1	10.5	4.5
Q120	1.0	1.5	10.0

RECEIVER CIRCUIT BOARD

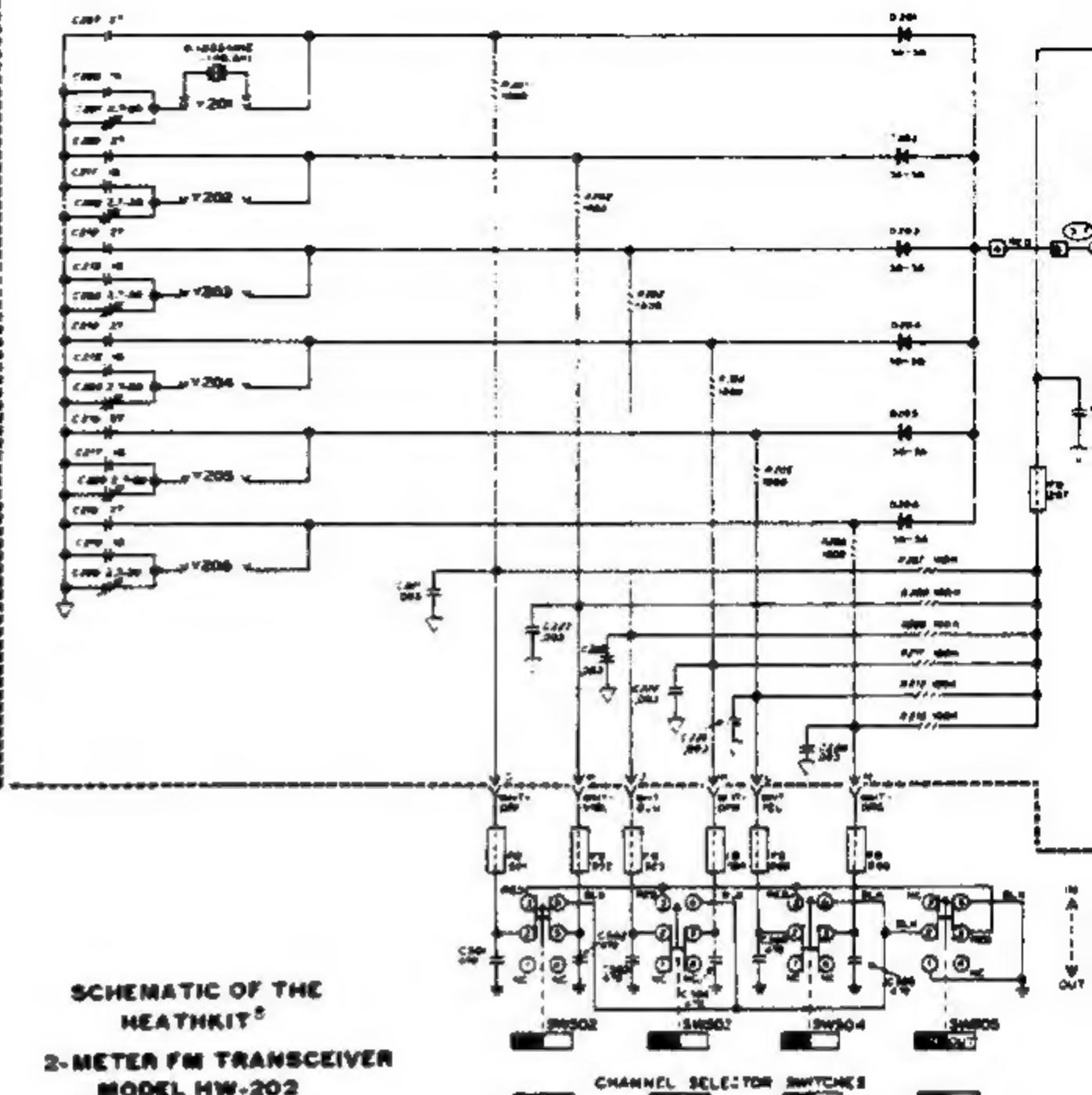




# NOTES

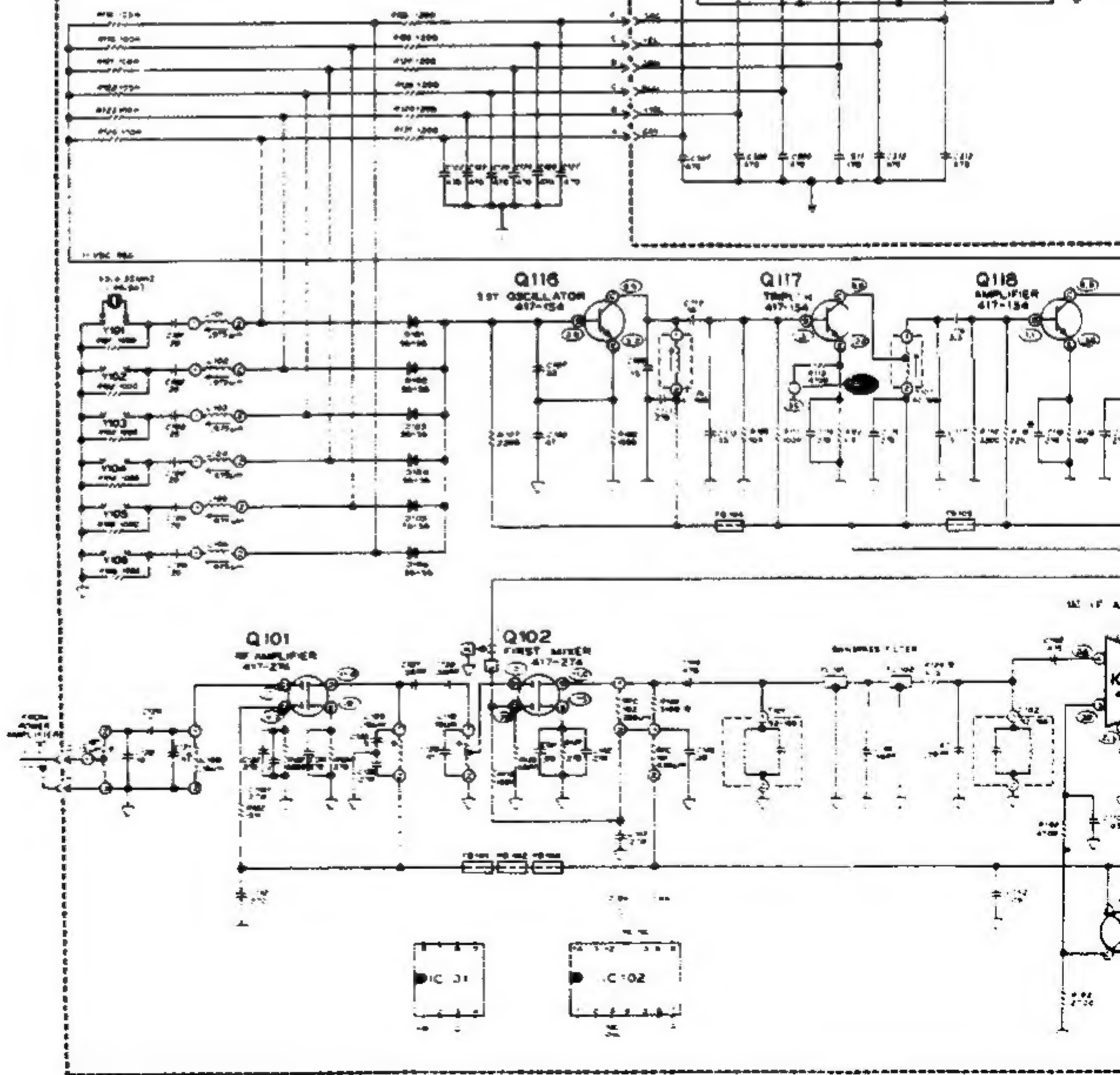
1. COMPONENT NUMBERS ARE IN THE FOLLOWING GROUPS:
  - 100-199 PARTS ON THE RECEIVER CIRCUIT BOARD
  - 200-299 PARTS ON THE TRANSMITTER CIRCUIT BOARD
  - 300-399 PARTS ON THE POWER AMPLIFIER CIRCUIT BOARD
  - 400-499 PARTS ON THE MASH FILTER/REGULATOR CIRCUIT BOARD
  - 500-599 PARTS ON THE CHASSIS
2. ALL RESISTORS ARE 1/2 WATT 10% TOLERANCE UNLESS OTHERWISE NOTED. RESISTOR VALUES ARE IN OHMS, K=1000, M=1 000 000.
3. CAPACITORS LESS THAN 1 ARE IN PF (PICOFARADS); ALL OTHER CAPACITORS ARE IN  $\mu$ F (MICROFARADS) UNLESS OTHERWISE MARKED.
4. INDUCTORS ARE SHOWN IN MM (MILLIHENRIES) AND  $\mu$ H (MICROHENRIES).
5. ARROWS AT CONTROLS INDICATE CLOCKWISE ROTATION VIEWED FROM THE SHAFT END OF THE CONTROL.
6.  THIS SYMBOL AROUND A PART NUMBER MEANS THAT THIS COMPONENT IS MOUNTED ON THE CHASSIS THOUGH ITS LOCATION ON THE SCHEMATIC SUGGESTS OTHERWISE.
7.  THIS SYMBOL INDICATES A POSITIVE DC VOLTAGE MEASURED WITH A HIGH INPUT IMPEDANCE VOLTMETER FROM THE POINT INDICATED TO CHASSIS GROUND UNDER THE FOLLOWING CONDITIONS:
  1. NO SIGNAL INPUT
  2. RECEIVER SQUELCHED AT THRESHOLD
  3. VOLUME FULLY COUNTERCLOCKWISE
  4. LOWEST FREQUENCY RECEIVER OSCILLATOR CRYSTAL SELECTED
  5. TRANSMITTER VOLTAGES KEVED WITHOUT MODULATION
8.  THIS SYMBOL INDICATES CIRCUIT BOARD GROUND.
9.  THIS SYMBOL INDICATES CHASSIS GROUND.
10.  THIS SYMBOL INDICATES A CIRCUIT BOARD CONNECTOR PIN AND A FEMALE WIRE CONNECTOR.
11.  THIS SYMBOL INDICATES A SOLDERED CONNECTION TO A CIRCUIT BOARD.
12.  SEE TABLES 1 AND 2 FOR VOLTAGES.
13.  THIS SYMBOL DESIGNATES A 5% TOLERANCE RESISTOR.
14.  THIS SYMBOL DENOTES A COIL WOUND BY THE KIT BUILDER.
15. REFER TO THE "CHASSIS PHOTOGRAPHS" AND "CIRCUIT BOARD X-RAY VIEWS" FOR THE PHYSICAL LOCATION OF PARTS.
16. P301 AND J301 ARE MATING SIDE VIEWS.
17. TP-TEST POINT  
FB-FERRITE BEAD
18.  THIS SYMBOL INDICATES A RECTIFIED RF VOLTAGE MEASURED WITH A HIGH INPUT IMPEDANCE VOLTMETER. USE A 100K $\Omega$  RESISTOR IN SERIES WITH THE VOLTMETER PROBE.

## TRANSMITTER CIRCUIT BOARD



## SCHEMATIC OF THE HEATHKIT 2-METER FM TRANSCEIVER MODEL HW-202

## RECEIVER CIRCUIT BOARD



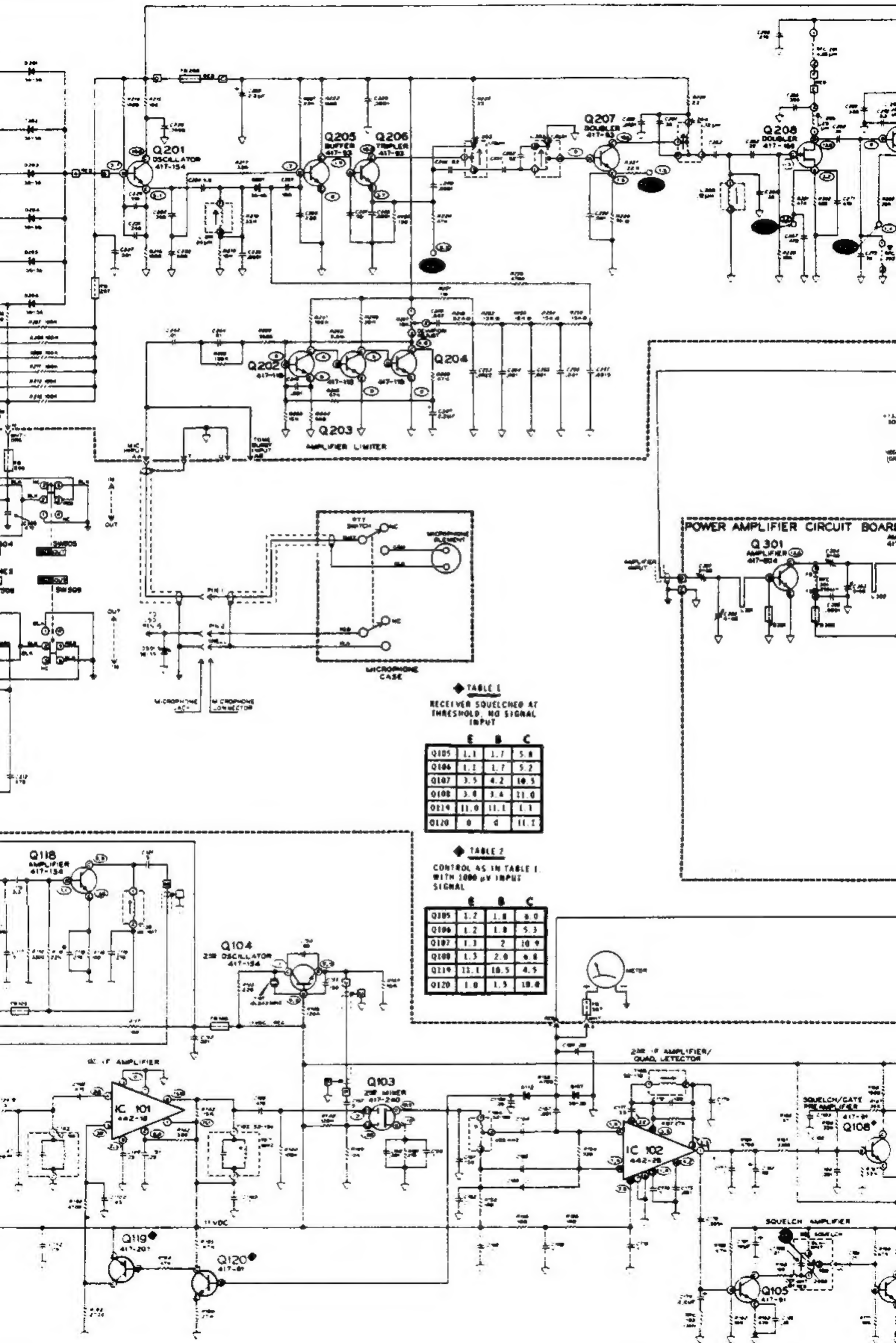


TABLE 1  
RECEIVER SQUELCHED AT  
THRESHOLD, NO SIGNAL  
INPUT

	E	B	C
Q105	1.1	1.7	5.8
Q106	1.1	1.7	5.2
Q107	3.5	4.2	10.5
Q108	3.0	3.4	11.0
Q119	11.0	11.1	1.1
Q120	0	0	11.1

TABLE 2  
CONTROL AS IN TABLE 1,  
WITH 1000  $\mu$ V INPUT  
SIGNAL

	E	B	C
Q105	1.2	1.8	6.0
Q106	1.2	1.8	5.3
Q107	1.3	2	10.9
Q108	1.3	2.0	9.8
Q119	12.1	10.5	4.5
Q120	1.0	1.5	10.0

